New Cervical Cancer Screening Recommendations Issued by the American Cancer Society (ACS), the American Society of Colposcopy and Cervical Pathology (ASCCP), and the American Society for Clinical Pathology (ASCP)

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Screening guidelines for cervical cancer were updated in 2012 after the last update in 2002. A structured evidence evaluation process, known as the Grading Recommendations Assessment, Development, and Evaluation (GRADE) system, was utilized to form the new guidelines.1,2,3

The new recommendations address the following:1,2,3

- **Age to begin screening:** Screening should begin at age 21. Women younger than 21 years should not be screened regardless of the age of sexual initiation or other risk factors, as this may lead to unnecessary treatment of lesions with a high probability of regressing spontaneously.

- **Screening periodicity:** Women at any age should not be screened annually by any method.
  
  a. **Women aged to 21 to 29 years:** Screening with cytology alone every three years is recommended. Because of the high prevalence of HPV infections in women younger than 30, HPV testing should not be used either as a stand-alone test or a cotest.

  b. **Women aged 30 to 65 years:** The recommendation is screening with cytology and HPV testing (cotesting) every five years (preferred) or cytology alone every three years (acceptable). However, the United States Preventive Services Task Force (USPSTF) considers evidence supporting cotesting insufficient for any recommendation.4 The difference arises from the way the two guidelines were developed.

  c. **Management of women with HPV-positive, cytology-negative cotests:** HPV-positive women who have Pap tests that are negative for intraepithelial lesion or malignancy (NILM) should not be referred directly to colposcopy. The evidence for non-HPV biomarkers as follow-up is insufficient. There are two management options:

    1) Repeat cotesting in 12 months:
    a) If either test is positive again, refer to colposcopy.
    b) If both tests are negative, return to routine screening.

    2) Immediate HPV genotype-specific testing for HPV16 or HPV16/18.
    a) If positive, refer to colposcopy.
    b) If negative, cotest in 12 months and follow the Option 1 algorithm.

  d. **Management of women with HPV-negative, ASC-US cytology results:** Continue with routine screening according to age-specific guidelines.

  e. **Screening with HPV testing alone:** Although this approach appears promising, screening should not be done with HPV testing alone as an alternative to cotesting or cytology alone at this point. The reasons for this recommendation are:

    o Lack of a well-defined and evaluated management strategy for positive tests
    o Lack of an internal standard for specimen adequacy for some HPV assays
Decreased specificity compared to cytology alone and potential for detection of clinically insignificant disease that will spontaneously regress.

Guidelines recommend against the use of non–FDA-approved, laboratory-developed HPV tests because the long-term negative predictive value of validated HPV testing is the main basis for justifying extended screening intervals. Nevertheless, laboratory-developed testing remains widespread. Even among the FDA-approved assays, levels of sensitivity and specificity differ. However, there is evidence that HPV tests better predict the women who will develop CIN3 or carcinoma over the next 10 to 18 years than cytology.

f. **Women aged older than 65 years:** If there is adequate negative prior screening (three consecutive negative cytology results or two consecutive negative cotests within the previous 10 years) and no history of high-grade intraepithelial lesion or carcinoma within the last 20 years, screening may be discontinued. Once discontinued, screening should not resume.

g. **Women aged older than 65 years with a history of high-grade squamous intraepithelial lesions (CIN2, CIN3, or adenocarcinoma in situ):** Following spontaneous regression or appropriate management, routine screening should continue for at least 20 years, even if this extends past age 65 years.

h. **Women who have undergone hysterectomy and have no history of high-grade squamous intraepithelial lesion or cervical cancer:** This group should not be screened for vaginal cancer using any modality. Evidence of adequate negative prior screening is not required.

i. **Screening following vaccination:** Since there is no data to support changes, screening practices should not be modified based upon vaccination status. Continued screening in the vaccinated population is necessary because:
   - About 30% of cervical cancers will continue to occur since the first generation of vaccines covers only high-risk types HPV16 and HPV18.
   - Many women may be vaccinated after an HPV infection has already occurred.
   - Low opportunistic vaccine coverage in the United States remains a barrier.

Additional points:
- Conventional cytology and liquid-based cytology are considered equivalent regarding screening guidelines.
- HPV testing is for high-risk HPV; tests for low-risk HPV should not be performed.

Finally, approximately half of the cervical cancers diagnosed in the US are in women who were never screened, and an additional 10% occur among women not screened within the past five years. The largest, immediate gain in reducing cervical cancer incidence and mortality could be reached by increasing access to screening, regardless of the test used.

References


